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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,912	11/14/2003	Mitsutoshi Higashi	300.1138	7653
21171	7590	04/03/2008		
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER SCHILLINGER, LAURA M	
			ART UNIT 2813	PAPER NUMBER
			MAIL DATE 04/03/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/706,912

**Applicant(s)**

HIGASHI, MITSUTOSHI

**Examiner**

Laura M. Schillinger

**Art Unit**

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-41 is/are pending in the application.
- 4a) Of the above claim(s) 35-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 29-324 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuo et al (US 20040016995 A1).

Kuo teaches the following claimed limitations as cited below:

29. (New) An electronic device having mounted thereon a microelectromechanical system (MEMS) element comprising a micromachine component and an electronic component for operation of said micromachine component formed on a substrate of said MEMS element, in which:

a lid having wiring patterns is bonded to the substrate of said MEMS element covering an active surface of said substrate (Fig. 5 (480/450)),

an operating space for said micromachine component is defined by said substrate and said lid (where element 315 is located), electrodes of said MEMS element (350) and wiring patterns of said lid (430/460/410) are electrically connected at a bonded part of said substrate and said lid (510), and

a sealing portion is provided between said MEMS element and said lid surrounding an outside of said bonded part [0101].

30. (New) The electronic device as set forth in claim 29, in which said bonded part is an ultrasonic bonded part of said substrate and said lid [0088].

31. (New) The electronic device as set forth in claim 29, in which said substrate and/or said lid further have a cavity at the side of said operating space Fig.5- outside sealing solder ball has cavity between itself and 510).

32. (New) The electronic device as set forth in claim 29, in which said sealing portion comprises a continuous ultrasonic bonded part formed in contact with an outer periphery of an operating space side of said substrate and said lid without interruption (Fig.5).

33. (New) The electronic device as set forth in claim 29, in which said substrate and/or said lid further comprise conductor-filled vias formed passing through said substrate and/or said lid in a thickness direction (Fig.5).

34. (New) The electronic device as set forth in claim 29, in which said sealing portion comprises a sealing resin [0101].

### ***Response to Arguments***

Applicant's arguments filed 1/9/08 have been fully considered but they are not persuasive. Applicant argues that bonding portion 510 cannot also act as the dealing portion- the Examiner agrees- however this was not the basis of the Examiner's rejection. Paragraph 0101 teaches the sealing ring- shown to the left and right of element 510. Applicant argues that this sealing ring does not act to "surround" the outside of element 510 as shown in Fig.5. Such an argument is not persuasive- a sealing ring surrounds. For further clarification, Applicant is referred to Applicant's own specification- specifically Fig.5- which shows seal ring 13 in relation to bonded portion 3; such a structure is identical to that shown by Kuo. Moreover, Applicant's own specification describes the frame like pattern of 13 as a "seal ring".

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Schillinger/  
Primary Examiner, Art Unit 2813

03/28/08